

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Joachim Kiefer, Oemer Uensal and Gordon Calundann  
Application No.: 10/523,373 ✓ Group Art Unit: 1713  
371 (c)/Filed: March 23, 2005 Examiner: Michael Bernshteyn  
Confirmation No.: 3591  
Title: Proton-Conducting Polymer Membrane Comprising a Polymer with Sulphonic Acid Groups and Use Thereof in Fuel Cells

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or is being facsimile transmitted to the United States Patent and Trademark Office on:

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Sandra Jammal  
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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

02/14/2006 HTECKLU1 00000093 10523373

01 FC:1806

180.00 DP

Sir:

This Information Disclosure Statement is submitted:

☐ under 37 CFR 1.129(a), or  
(First/Second submission after Final Rejection)

☐ under 37 CFR 1.97(b), or  
(Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the national stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, including a CPA, or a Request for Continued Examination).

☒ under 37 CFR 1.97(c) together with either:  
☐ a Statement under 37 CFR 1.97(e), as checked below, or  
☒ a \$180.00 fee under 37 CFR 1.17(p), or  
(After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)

☐ under 37 CFR 1.97(d) together with:  
☐ a Statement under 37 CFR 1.97(e), as checked below, and  
☐ a \$180.00 fee under 37 CFR 1.17(p), or  
(Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee)

☐ under 37 CFR 1.97(i):  
Applicant requests that the IDS and cited reference(s) be placed in the application file.  
(Filed after payment of issue fee)

Statement Under 37 CFR 1.97(e)

- ☐ Each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or
- ☐ No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

Statement Under 37 CFR 1.704(d) (Patent Term Adjustment)

Applies to original applications (other than design) filed on or after May 29, 2000

- ☐ Each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in § 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.
- ☒ Enclosed herewith is form PTO-1449:
  - ☒ Copies of the cited references are enclosed. [AM-AN5, AR-AT]
  - ☐ Copies of issued U.S. patents and published U.S. applications are not required and are not being provided.
  - ☐ Copies of the cited references are enclosed except those entered in prior application, U.S. Application No. [ ], to which priority under 35 U.S.C. 120 is claimed. [The earlier application contains copies of the cited references.]
  - ☐ The listed references were cited in the enclosed International Search Report in a counterpart foreign application.
- ☒ The "concise explanation" requirement (non-English references) for reference(s) [AM-AO, AQ, AL2, AM3, AO3, AP3-AL4, AN4-AQ4, AL5-AN5] under 37 CFR 1.98(a)(3) is satisfied by:
  - ☐ the explanation provided on the attached sheet.
  - ☐ the explanation provided in the Specification.
  - ☐ submission of the enclosed International Search Report.
  - ☐ submission of the enclosed English-language version of a foreign Search Report and/or foreign Office Action.
  - ☒ the enclosed English language abstract.

☐ Applicant requests that the following non-published pending applications be considered:

Examiner's  
Initials

\_\_\_\_\_ U.S. Patent Application No. [ ], by [inventor(s)], filed [ ], Docket No.: [ ]

\_\_\_\_\_ U.S. Patent Application No. [ ], by [inventor(s)], filed [ ], Docket No.: [ ]

\_\_\_\_\_ U.S. Patent Application No. [ ], by [inventor(s)], filed [ ], Docket No.: [ ]

\_\_\_\_\_  
Examiner

\_\_\_\_\_  
Date

- ☐ A copy of each above-cited application, including the current claims, is enclosed, except any application filed on or after June 30, 2003, which has been scanned into the PTO's Image File Wrapper (IFW) system and is available to the examiner.
- ☐ A copy of each above-cited application, including the current claims, is enclosed, except those entered in prior application, U.S. Application No. [ ], to which priority under 35 U.S.C. 120 is claimed.

The Examiner is requested to return a copy of the above list of pending applications indicating which references were considered with the next office communication.

It is requested that the information disclosed herein be made of record in this application.

Method of payment:

- ☒ A check for the fee noted above is enclosed, or the fee has been included in the check with the accompanying Reply. A copy of this Statement is enclosed.
- ☐ Please charge Deposit Account 08-0380 in the amount of \$[ ]. A copy of this Statement is enclosed.
- ☒ Please charge any deficiency in fees and credit any overpayment to Deposit Account 08-0380.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By Alexander Akhiezer

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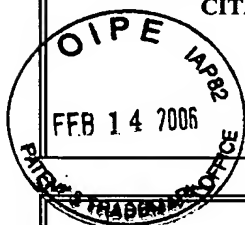
Dated: 2/10/06

PTO-1449 REPRODUCED

SUPPLEMENTAL INFORMATION DISCLOSURE  
CITATION IN AN APPLICATION

February 10, 2006

(Use several sheets if necessary)

ATTORNEY DOCKET NO.  
3799.1009-000APPLICATION NO.  
10/523,373FIRST NAMED INVENTOR  
Joachim KieferFILING DATE  
March 23, 2005EXAMINER  
Michael BernshteynCONFIRMATION NO.  
3591GROUP  
1713

## U.S. PATENT DOCUMENTS

| EXAM-<br>INER<br>INI-<br>TIAL | REF.<br>NO. | DOCUMENT NUMBER<br>Number-Kind Code (if known) | ISSUE DATE /<br>PUBLICATION DATE<br>MM-DD-YYYY | NAME OF PATENTEE OR APPLICANT<br>OF CITED DOCUMENT |
|-------------------------------|-------------|--|--|--|
|                               | AC          | 3,224,908                                      | 12-21-1965                                     | Duch, <i>et al.</i>                                |
|                               | AD          | 3,293,088                                      | 12-20-1966                                     | Herbst, <i>et al.</i>                              |
|                               | AE          | 3,737,045                                      | 06-05-1973                                     | Hasimoto, <i>et al.</i>                            |
|                               | AF          | 3,808,305                                      | 04-30-1974                                     | Gregor   |
|                               | AG          | 4,012,303                                      | 03-15-1977                                     | D'Agostino, <i>et al.</i>                          |
|                               | AH          | 4,187,333                                      | 02-05-1980                                     | Rembaum, <i>et al.</i>                             |
|                               | AI          | 4,537,668                                      | 08-27-1985                                     | Gaussens, <i>et al.</i>                            |
|                               | AJ          | 4,622,276                                      | 11-11-1986                                     | Walsh  |
|                               | AK          | 4,634,530                                      | 01-06-1987                                     | Kuder, <i>et al.</i>                               |
|                               | AA2         | 5,098,985                                      | 03-24-1992                                     | Harris, <i>et al.</i>                              |
|                               | AB2         | 5,211,984                                      | 05-18-1993                                     | Wilson   |
|                               | AC2         | 5,218,076                                      | 06-08-1993                                     | Madison, <i>et al.</i>                             |
|                               | AD2         | 5,312,895                                      | 05-17-1994                                     | Dang, <i>et al.</i>                                |
|                               | AE2         | 5,492,996                                      | 02-20-1996                                     | Dang, <i>et al.</i>                                |
|                               | AF2         | 5,599,639                                      | 02-04-1997                                     | Neoya, <i>et al.</i>                               |
|                               | AG2         | 5,633,337                                      | 05-27-1997                                     | Tan, <i>et al.</i>                                 |
|                               | AH2         | 5,643,968                                      | 07-01-1997                                     | Andreola <i>et al.</i>                             |
|                               | AI2         | 5,656,386                                      | 08-12-1997                                     | Scherer, <i>et al.</i>                             |
|                               | AJ2         | 5,674,969                                      | 10-07-1997                                     | Sikkema, <i>et al.</i>                             |
|                               | AK2         | 6,030,718                                      | 02-20-2000                                     | Fuglevand, <i>et al.</i>                           |
|                               | AA3         | 6,087,032                                      | 07-11-2000                                     | Yoshitake, <i>et al.</i>                           |
|                               | AB3         | 6,096,369                                      | 08-01-2000                                     | Anders, <i>et al.</i>                              |
|                               | AC3         | 6,110,616                                      | 08-29-2000                                     | Sheikh-Ali, <i>et al.</i>                          |
|                               | AD3         | 6,197,147 B1                                   | 04-06-2001                                     | Bönsel, <i>et al.</i>                              |
|                               | AE3         | 6,248,469 B1                                   | 06-19-2001                                     | Formato, <i>et al.</i>                             |

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|   |   |                                      |                                      |
|---|---|--------------------------------------|--------------------------------------|
| PTO-1449 REPRODUCED<br><br><b>SUPPLEMENTAL INFORMATION DISCLOSURE<br/>CITATION IN AN APPLICATION</b><br><br><b>February 10, 2006</b><br><br>(Use several sheets if necessary) | ATTORNEY DOCKET NO.<br><b>3799.1009-000</b>   | APPLICATION NO.<br><b>10/523,373</b> |                                      |
|   | FIRST NAMED INVENTOR<br><b>Joachim Kiefer</b> |                                      | FILING DATE<br><b>March 23, 2005</b> |
|   | EXAMINER<br><b>Michael Bernshteyn</b>         | CONFIRMATION NO.<br><b>3591</b>      | GROUP<br><b>1713</b>                 |

| FOREIGN PATENT DOCUMENTS |     |  |                    |  |                       |  |
|--------------------------|-----|--|--------------------|--|-----------------------|--|
|                          |     | DOCUMENT NUMBER<br>Country Code-Number-Kind Code<br>(if known) | DATE<br>MM-DD-YYYY | NAME OF PATENTEE OR<br>APPLICANT<br>OF CITED DOCUMENT          | TRANSLATION<br>YES NO |  |
|                          | AM  | DE 101 48 131 A1   | 05-08-2003         | GKSS-Forschungszentrum<br>Geesthacht GmbH                      |                       |  |
|                          | AN  | DE 1 301 578   | 08-21-1969         | Teijin Ltd.  |                       |  |
|                          | AO  | DE 196 53 484 A 1  | 06-25-1998         | Fraunhofer Ges Foerderung<br>Angewandten                       |                       |  |
|                          | AP  | EP 0 265 921 A2 & A3   | 05-04-1988         | Hoechst Celanese Corporation                                   |                       |  |
|                          | AQ  | EP 0 846 733 A2  | 06-10-1998         | Daimler-Benz Aktiengesellschaft<br>(DE)                        |                       |  |
|                          | AP2 | EP 0 893 165 A2  | 01-27-1999         | Huels Chemische Werke AG                                       |                       |  |
|                          | AM2 | EP 1 110 992 A1  | 06-27-2001         | Kabushiki Kaisha Toyota Chuo                                   |                       |  |
|                          | AN2 | EP 1 202 365 A1  | 05-02-2002         | Center for Advanced Science and<br>Technology Incubation, Ltd. |                       |  |
|                          | AQ2 | EP 1354907 A1  | 10-22-2003         | Toyo Boseki Kabusiki Kaisha                                    |                       |  |
|                          | AP2 | WO 94/25506  | 11-10-1994         | Akzo Nobel N.V.  |                       |  |
|                          | AQ2 | WO 99/10165  | 03-04-1999         | Foster-Miller, Inc. (US)                                       |                       |  |
|                          | AL3 | WO 00/49069  | 08-24-2000         | Mikael Paronen   |                       |  |
|                          | AM3 | WO 00/54351  | 09-14-2000         | Center for Advanced Science and<br>Technology Incubation, Ltd. |                       |  |
|                          | AN3 | WO 01/45192 A1   | 06-21-2001         | Proton Energy Systems, Inc.                                    |                       |  |
|                          | AO3 | WO 02/081547 A1  | 10-17-2002         | Celanese Ventures GmbH   |                       |  |
|                          | AP3 | WO 02/088219 A1  | 11-07-2002         | Celanese Ventures GmbH   |                       |  |
|                          | AQ3 | WO 02/38650 A1   | 05-16-2002         | Toyo Boseki Kabusiki Kaisha                                    |                       |  |
|                          | AL4 | WO 03/022412 A2 & A3   | 03-20-2003         | Celanese Ventures GmbH   |                       |  |
|                          | AM4 | EP 0 476 560 A1  | 03-25-1992         | The Dow Chemical Company                                       |                       |  |
|                          | AN4 | WO 02/071518 A1  | 09-12-2002         | Celanese Ventures GMBH   |                       |  |
|                          | AO4 | WO 02/102881 A1  | 12-27-2002         | Celanese Ventures GMBH   |                       |  |
|                          | AP4 | WO 02/36249 A1   | 05-10-2002         | Celanese Ventures GMBH   |                       |  |

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Spry, R. J., *et al.* "Anisotropic Ionic Conductivity of Lithium-Doped Sulfonated PBI, *J. Of Polymer Sci.: Part B: Polymer Physics*, 35: 2925-2933 (1997)

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